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Applicant: **INTERNATIONAL BUSINESS
MACHINES CORPORATION**

Armonk, NY 10504(US)

Inventor: **Choi, Sung Min**
1 Franklin Avenue, Apt. 4E
White Plains, N.Y. 10601(US)
Inventor: **Lumelsky, Leon**
30 Gaxton Road
Stamford, Conn. 06905(US)
Inventor: **Peevers, Alan Wesley**
1170 Grizzly Peak Boulevard
Berkeley, Ca. 94708(US)
Inventor: **Pittas, John Louis**
46 Kingswood Drive
Bethel, Conn. 06806(US)

Representative: **Herzog, Friedrich Joachim,**
Dipl.-Ing.
IBM Deutschland Informationssysteme
GmbH Patentwesen und Urheberrecht
Pascalstrasse 100
D-70569 Stuttgart (DE)

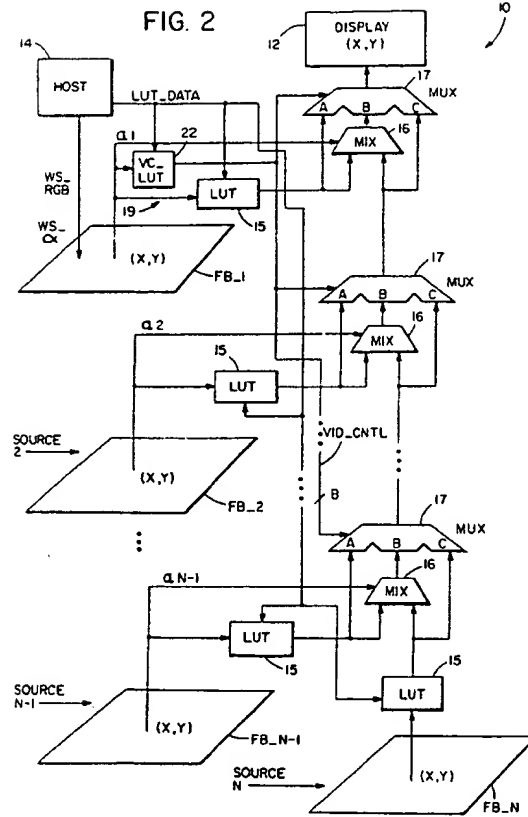
Multi-source image real time mixing and anti-aliasing.

Method and apparatus for implementing a raster graphic display video data path that provides arbitrary mixing of a plurality of images. The video data path is highly parallelized, and employs parallel devices operating under the control of a set of look-up tables (15). The look-up tables are loadable from a controller, such as a host workstation (14). The raster graphic display video data path functions with unlimited screen resolutions, and also enables a variety of different pixel data formats (15) from a potentially large number of different sources. Out-

puts from several image sources are mixed under the control of the host workstation, with a resultant pixel value being based on (a) a combined translucency coefficient (alpha) of the images, for each image source, and (b) a window identification number assigned by the host workstation. Pixel value conversion to a common predetermined format provides coherency between pixel values generated by a number of different image sources, such as HDTV and graphics servers. A separate frame buffer (FB-1 to FB-N) is allocated for each of the sources.

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FIG. 2





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EUROPEAN SEARCH REPORT

Application Number

EP 92 11 1173

| DOCUMENTS CONSIDERED TO BE RELEVANT | | | |
|--|---|--|---|
| Category | Citation of document with indication, where appropriate, of relevant passages | Relevant to claim | CLASSIFICATION OF THE APPLICATION (Int. Cl.5) |
| D,X | US-A-5 001 469 (PAPPAS ET AL.) * column 2, line 26 - line 44 * * column 3, line 6 - column 6, line 15 * | 1,10,11 | H04N5/272 H04N5/262 G09G1/16 |
| D,Y | --- | 2-7,12, 13,15-18 | |
| X | GB-A-2 238 214 (QUANTEL LIMITED) * page 7, line 10 - line 25 * * page 12, line 16 - page 14, line 22 * | 14 | |
| Y | --- | 7,12,13, 15-18 | |
| A | --- | 1-6, 10-12 | |
| Y | EP-A-0 236 943 (THE GRASS VALLEY GROUP, INC.) * the whole document * | 2-7 | |
| A | --- | 12,15,16 | |
| A | US-A-4 357 624 (GREENBERG) * column 4, line 12 - line 46 * * column 13, line 18 - line 68 * * column 20, line 12 - line 68 * | 1,4,8, 10,13,15 | TECHNICAL FIELDS SEARCHED (Int. Cl.5) |
| A | FR-A-2 640 837 (BTS BROADCAST TELEVISION SYSTEMS GMBH) * page 1, line 1 - page 3, line 3 * * page 3, line 27 - page 6, line 5 * | 1-4,7, 10,12, 15,16,18 | H04N |
| A | EP-A-0 160 549 (AMPEX CORPORATION) * page 7, line 29 - page 9, line 37 * | 1,10,15 | |
| D,A | US-A-4 994 912 (LUMELSKY ET AL.) * column 1, line 44 - line 54 * * column 2, line 20 - line 37 * | 1,13,15 | |
| The present search report has been drawn up for all claims | | | |
| Place of search THE HAGUE | | Date of completion of the search 30 JUNE 1993 | Examiner DE DIEULEVEULT A.J. |
| CATEGORY OF CITED DOCUMENTS X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons ----- & : member of the same patent family, corresponding document | | | |